

OCT 22 1930

# The Classical Weekly

Published on Monday, October 1 to May 31, except in weeks in which there is a legal or School holiday (Election Day, Thanksgiving Day, Christmas Day, New Year's Day, Lincoln's Birthday, Washington's Birthday, Easter Sunday, Decoration Day).  
Place of Publication, Barnard College, New York City. In the United States of America, \$2.00 per volume; elsewhere, \$2.50.  
Single numbers, 15 cents each. Address all communications to Charles Knapp, at 1737 Sedgwick Avenue, New York City.  
Entered as second-class matter, November 18, 1907, at the Post Office, New York, N. Y., under the Act of Congress of March 3, 1879. Acceptance for mailing at special rate provided for in Section 1103, Act of October 3, 1917, authorized June 28, 1918.

VOL. XXIV, No. 3

MONDAY, OCTOBER 20, 1930

WHOLE No. 640

Create new interest  
in third-year Latin  
and hold your stu-  
dents

with

## THIRD LATIN BOOK

By ULLMAN-HENRY-WHITE

the achievement supreme in textbooks for classes of this grade  
It provides

Easy transition from second-year work. Caesar's Civil War is the connecting link, in addition to reading assignments for review in vocabulary, syntax, and forms.

Selections from a number of different authors (see Contents).

Form work, syntax material, derivation, and word-study, vocabulary drills, summaries of prefixes and suffixes. For the first time a third-year Latin textbook contains sufficient material of this kind to make unnecessary any supplementary grammar or composition book.

Composition exercises based on the text material, consisting in part of connected passages. These are lively and interesting and not too difficult.

Emphasis on historical-cultural objectives. Both textual and illustrative material contribute to the attainment of these objectives.

Emphasis on the ability to read Latin.

An abundance of material. If your class needs require strict adherence to Cicero, there is sufficient material to do so; if, on the other hand, you wish to cut Cicero to the minimum, there is a wealth of material for variety.

THIRD LATIN BOOK is beautifully illustrated with photographs, many of them in color. They supplement the textual material in presenting aspects of Roman life and civilization.

It meets in every detail the requirements of the College Entrance Examination Board, and the New York State Syllabus, as well as the recommendations of the Classical Investigation.

### Contents (Partial)

CAESAR'S CIVIL WAR (Selections)

PLINY and GELLIUS (Selections)

PETRONIUS (Selections)

MACROBIUS and QUINTILIAN (Selections)

CICERO and SALLUST (Selections)

SENECA (Selections)

OVID'S METAMORPHOSES (Selections)

\$2.20

A member of the Macmillan  
Classical Series,  
General Editor, B. L. ULLMAN

## THE MACMILLAN COMPANY

New York

Chicago

Boston

Dallas

Atlanta

San Francisco

## NOW COMPLETE

# PLACE'S NEW LATIN

WITH the publication of the *Second Latin Course*, the new Place Latin books now cover the first two years of Latin, following the recommendations of the Report of the Classical Investigation and meeting the new requirements of the College Entrance Examination Board.

THE subjunctive and more difficult forms and principles are postponed until the beginning of the second year and are presented in *Intermediate Latin Lessons*. The *Enlarged Edition* of *First Year Latin*, including *Intermediate Latin Lessons*, provides the traditional first-year course. The *Second Latin Course* is intended to follow the author's *First Year Latin*.

THESE BOOKS present the forms and principles with great simplicity, accompanied by abundant drill and constant comparison of Latin and English. An historical introduction, exercises in prose composition, etc., are included.

THE early reading lessons consist of human-interest stories based upon Roman history and legend, teaching all sides of classical civilization and providing the desired cultural background and Roman atmosphere. The selections from Caesar include all the prescribed requirements besides some additional passages for supplementary reading.

First Year Latin . . . . .	\$1.32
Intermediate Latin Lessons . . . . .	.40
First Year Latin. Enlarged (Including Intermediate Latin Lessons) . . . . .	1.40
Second Latin Course . . . . .	1.68

By PERLEY OAKLAND PLACE, Professor of Latin,  
Syracuse University

---

## AMERICAN BOOK COMPANY

NEW YORK

CINCINNATI

CHICAGO

BOSTON

ATLANTA

# The Classical Weekly

VOLUME XXIV, No. 3

MONDAY, OCTOBER 20, 1930

WHOLE No. 640

## THE LOEB CLASSICAL LIBRARY RECENT ADDITIONS

(Concluded from page 11)

(11) Lucius Annaeus Florus, *Epitome of Roman History*. By Edward Seymour Forster. Cornelius Nepos. By John C. Rolfe, of the University of Pennsylvania (1929). Pp. xv + 744.

To his translation of Florus Mr. Forster prefixes an Introduction (ix-xv), which deals briefly with The Author (ix-x), The Work (x-xii), and The Text (xii-xv), and gives, under the caption Bibliography (xv), a list of eleven "principal editions" of Florus, and mentions one English translation of Florus.

Professor Rolfe gives an Introduction (355-364), which discusses The Life and Works of Cornelius Nepos (355-361), and The Manuscripts (361-363), and presents a Bibliographical Note (363-364).

Professor Rolfe's contributions to The Loeb Classical Library include also a translation of Suetonius (two volumes: THE CLASSICAL WEEKLY 7.192), a translation of Aulus Gellius (three volumes: THE CLASSICAL WEEKLY 21.27, 22.162-163), and a version of Sallust (THE CLASSICAL WEEKLY 15.199).

A very interesting passage in Nepos is his Praefatio. I give Professor Rolfe's rendering of it (see pages 369, 371).

I doubt not, Atticus, that many readers will look upon this kind of writing as trivial and unworthy of the parts played by great men, when they find that I have told who taught Epaminondas music or who mentioned it among his titles to fame that he was a graceful dancer and a skilled performer on the flute. But such critics will for the most part be men unfamiliar with Greek letters, who will think no conduct proper which does not conform to their own habits. If these men can be made to understand that not all peoples look upon the same acts as honourable or base, but that they judge them all in the light of the usage of their forefathers, they will not be surprised that I, in giving an account of the merits of Greeks, have borne in mind the usage of that nation. For example, it was no disgrace to Cimon, an eminent citizen of Athens, to have his own sister to wife, inasmuch as his countrymen followed that same custom; but according to our standards such a union is considered impious. . . . Almost everywhere in Greece it was deemed a high honour to be proclaimed victor at Olympia; even to appear on the stage and exhibit oneself to the people was never regarded as shameful by those nations. With us, however, all those acts are classed either as disgraceful, or as low and unworthy of respectable conduct.

On the other hand, many actions are seemly according to our code which the Greeks look upon as shameful. For instance, what Roman would blush to take his wife to a dinner-party? What matron does not frequent the front rooms of her dwelling and show herself in public? But it is very different in Greece; for there a woman is not admitted to a dinner-party, unless relatives only are present, and she keeps to the more retired part of the house called "the women's

apartment," to which no man has access who is not near of kin.

I never read this passage without thinking of Cicero, *Tusculanae Disputationes* 1.1-5; so, when I read that passage of Cicero, I think of Nepos's Praefatio.

(12) Livy, V (the fifth of thirteen volumes). By B. O. Foster, of Stanford University (1929). Pp. xx + 413.

For notices of the earlier volumes of Professor Foster's translation of Livy see THE CLASSICAL WEEKLY 13.169, 16.193, 21.26.

Volume V contains a Translator's Preface (vii-xii), a Bibliography (xiii-xix), a list of The Manuscripts (xx), Text and Translation of Books XXI-XXII (2-413). The seven maps show, respectively, Hannibal's Route Over the Alps, Operations on the Po, Battle of the Trebia, Placentia to Picenum, Battle of Lake Trasimennus, 217 B. C., Callicula and Gerunium, and Battle of Cannae.

In the Translator's Preface (vii-xi) Professor Foster discusses the manuscripts on which the text of Livy, Books XXI-XXII must rest. I quote with hearty approval the following passage (xi), and I commend it to the attention of other contributors to The Loeb Classical Library.

...For the punctuation I must myself assume the responsibility, and hope it may prove more helpful to English and American readers than the German system, which has too often made its way into classical texts edited primarily for use elsewhere than in Germany.

In the brief Bibliography I have listed a few of the multitude of books and articles useful for the understanding of Livy. My choice has been guided by two considerations: I wished first to put the reader who is beginning the study of Livy into touch with some of the recent work on his history, and more especially the Third Decade, and the various questions as to sources, style, antiquities, etc. arising in connection with it; and secondly, to list the books that have been of most assistance to me in preparing my own text and translation. To this general acknowledgment I would add a special word of appreciation of the help I have received from the various English translations and editions, from one or another of which I have sometimes borrowed a phrase or turn of expression.

The Bibliography (xiii-xix) is, so far as substance goes, a real bibliography. The material is presented under thirteen headings: I. General (xiii), II. Sources (xiii-xiv), III. History (xiv), IV. Manuscripts (xiv-xv), V. Editions (xv-xvi), VI. Translations (xvi-xvii), VII. Topography (xvii-xviii), VIII. Military Antiquities (xviii), IX. Political Antiquities (xviii), X. Religious Antiquities (xviii), XI. Hannibal (xviii), XII. Scipio (xviii-xix), XIII. Style and Technique (xix).

I remarked above that bibliographies and indexes are the weakest parts of books. I wrote the present

article on The Loeb Classical Library in August last, at Lexington, Kentucky, far away from my books and far away from any extensive classical library. I was none the less sure that on page xviii, under IX, Professor Foster had made a slip when he wrote the following: "Frank Frost Abbott, A History and Description of Roman Political Institutions. Boston, 1901". On my return home I found that there were two later editions, in 1907 and in 1911. The book is published by Messrs. Ginn and Company.

In THE CLASSICAL WEEKLY 18.162 I gave a specimen of Professor Foster's powers as a translator. I give here his version of 21.37<sup>4</sup> (pages 107, 109, 111).

At last, when men and beasts had been worn out to no avail, they encamped upon the ridge, after having, with the utmost difficulty, cleared enough ground even for this purpose, so much snow were they obliged to dig out and remove. The soldiers were then set to work to construct a road across the cliff—their only possible way. Since they had to cut through the rock, they felled some huge trees that grew near at hand, and lopping off their branches, made an enormous pile of logs. This they set on fire, as soon as the wind blew fresh enough to make it burn, and pouring vinegar over the glowing rocks, caused them to crumble. After thus heating the crag with fire, they opened a way in it with iron tools, and relieved the steepness of the slope with zigzags of an easy gradient, so that not only the baggage animals but even the elephants could be led down. Four days were consumed at the cliff, and the animals nearly perished of starvation; for the mountain tops are all practically bare, and such grass as does grow is buried under snow. Lower down one comes to valleys and sunny slopes and rivulets, and near them woods, and places that begin to be fitter for man's habitation. There the beasts were turned out to graze, and the men, exhausted with toiling at the road, were allowed to rest. Thence they descended in three days' time into the plain, through a region now that was less forbidding, as was the character of its inhabitants.

(13) Ovid, The Art of Love, and Other Poems. By J. H. Mozley (1929). Pp. xiv + 382.

In 1928 Mr. J. H. Mozley contributed to The Loeb Classical Library a version of Statius, *Silvae*, *Thebais*, and *Achilleis*, in two volumes. Of that work something was said in THE CLASSICAL WEEKLY 22.164-165.

Mr. Mozley's volume on Ovid contains Introduction (vii-xiv); Text and Translation of the following pieces: On Painting the Face<sup>5</sup> (*De Medicamine Faciei Liber*: 2-9), The Art of Love, (*Ars Amatoria*), Books I-III (12-175), The Remedies of Love<sup>6</sup> (*Remedia Amoris*: 178-233), The Walnut-Tree (*Nux*: 236-249), *Ibis* (252-307), On Sea-Fishing (*Halieuticon*: 310-321), and A Poem of Consolation (*Consolatio ad Liviam*: 324-357); Appendix: On Cursing in Ancient Times (359-372); Index of Names (373-379); Index of Subjects (381-382).

In the Introduction Mr. Mozley deals with the following topics: I. The Didactic Love-Poems <of

Ovid> (vii-x), II. Miscellaneous Pieces (x-xii), The Manuscripts (xii-xiv). There is also a Note on Editions, etc. (xiv). I reproduce here, in full, the Note on Editions, etc.

The "Ars" was edited with commentary by P. Brandt, Leipzig, 1902, and the "Ibis" by Robinson Ellis, Oxford, 1881. For the numerous articles, dissertations, etc., the student is referred to Schanz, *Römische Literaturgeschichte*, vol. II, Pt. i.

Here again we have an English contributor to The Loeb Classical Library forgetting entirely the purpose of the Library. The Library was not intended primarily for 'scholars': does a scholar need a translation of Cornelius Nepos, of the *Apology* and the *Crito* of Plato, of Vergil's *Aeneid*, of Homer? The Loeb Classical Library was meant for the man who had had little or no Latin and Greek, or for the man who, though trained once as men other than 'scholars' were, in an earlier generation, in Latin or in Greek, or in both, had, in the pressure of life's occupations, lost much of the knowledge of the classical languages he once possessed. Will such a man have at his command Schanz's great (and huge) work? Would it not have been not only more scholarly but also more kindly to warn the 'general reader' that various parts of Schanz's work have appeared in different editions, and to tell him to which edition he should go, and also to tell him where and when that edition was published?

It is a pleasure—a very great pleasure—to an American to be able to say, without hesitation, that the Introductions to the volumes contributed by American scholars to The Loeb Classical Library are, many of them, far superior to the Introductions to volumes contributed by a good many of the English scholars who have had a part in the making of the Library (for one wholly admirable exception see my remarks in THE CLASSICAL WEEKLY 22.153-154 on A. W. Mair's translation of Oppian, *Colluthus*, *Tryphiodorus*. For a grievously defective volume see my remarks in THE CLASSICAL WEEKLY 22.154 on W. R. M. Lamb's volume on Plato. See also my remarks in THE CLASSICAL WEEKLY 24.2).

CHARLES KNAPP

## GREEK AND ROMAN WEATHER LORE OF WINDS

(Continued from page 16)

### ETESIAN WINDS

The etesian or seasonal winds are frequently mentioned in classical literature, though there is no exact agreement in regard to their periods or their duration<sup>172</sup>. There seems to have been a tendency to associate them with prevailing winds<sup>173</sup>, but in general they were regarded as blowing from the north in summer and from the south in winter<sup>174</sup>. Aristotle<sup>175</sup> says that they blew after the summer solstice and the

<sup>4</sup>This is the famous passage which tells of the splitting of Alpine rocks by fire and vinegar. For discussions of the passage see THE CLASSICAL WEEKLY 15.168, 16.73-76, 96, 128, 18.88, 22.98-99. Professor Foster has an excellent note on the passage (see pages 108-109).

<sup>5</sup>On Painting the Face is not in any sense a translation of *De Medicamine Faciei*. Better would be On Doctoring the Face; this would be at least an up-to-the minute version. So The Remedies of Love does not render *Remedia Amoris*. *Amoris* is an objective genitive; of Love is ambiguous.

<sup>172</sup>See Gilbert (as cited in the text, near the beginning of this paper), 571, note 1; Arist., *Met.* 2.6, 362 a.

<sup>173</sup>See, for example, Arist., *Met.* 2.6, 365 a; Th., *De Ventis* 2.10-12; Gellius 2.22.30; Pliny 2.124, 18.335; Lucretius 5.742; Diodorus 1.39.6.

<sup>174</sup>See, for example, Tacitus, *Annales* 6.33.

<sup>175</sup>*Met.*, 2.6, 362 a.



rising of the Dog-star. Seneca<sup>176</sup> tells us that they started at the time of the summer solstice and that they relieved the severity of the scorching summer months. They did not blow strongly in Italy after the rising of the Dog-star<sup>177</sup>, a condition that seems at one time to have been paralleled on the island of Ceos. After the people of the island had suffered for a long time from drought and pestilence Aristaeus interceded with Zeus, who caused the etesian winds to blow for forty days after the rising of Sirius<sup>178</sup>. These winds were salubrious and refreshing<sup>179</sup>.

Cicero<sup>180</sup> says that the etesian winds made voyaging by sea speedy and certain<sup>181</sup>. They did—if one was going in their direction. In 218 B. C. Messenians implored Philip V of Macedon to come to their aid, pointing out that with the help of the winds he could easily sail from Cephallenia in one day. A secret enemy of Philip supported the proposal, knowing that, if Philip acceded, the summer would be wasted by him, since he could not sail back during the period of the winds<sup>182</sup>.

On one occasion a pilot urged Dion to seek safety upon the shore of Sicily from a menacing storm, reminding him that, if they should be blown away from the land, they would be tossed about for many days awaiting a south wind during the summer season<sup>183</sup>.

Another example of a certain tendency of the winds to blow in one direction is to be found in the caption of a picture in the National Geographic Magazine<sup>184</sup>.

Cretan windmills operate only when the wind blows from one point of the compass. But the strong breezes of the island do blow chiefly in one direction most of the time, and hence this row of windmills combs the gusts as they sweep down the valley.

The power of the etesian winds was mentioned very frequently in connection with the Nile<sup>185</sup>. The ancients never tired of telling how they drove back the waters of that river.

These winds ceased at night and rose about the third hour of the day<sup>186</sup>. Because of their reluctance to get up in the morning the sailors called them 'sleepy-headed' and 'dainty'<sup>187</sup>. By contrast this reminds one of an old saying: "A northwest wind is a gentleman and goes to bed".

Seneca records that the whole of India and Ethiopia was watered by constant rain during the prevalence of etesian winds<sup>188</sup>. In some places this period was a favorite period for drying and harvesting salt from evaporating sea water<sup>189</sup>.

<sup>176</sup>Seneca 5.10.2.

<sup>177</sup>Diodorus 4.82.1-3; Apollonius Rhodius 2.516-527; Clemens Alexandrinus, *Stromata* 6.28.4-6; Callimachus, *Aitia* 3.1 (page 209 of A. W. Mair's translation, in The Loeb Classical Library); Nonnus 5.269-270. See also Geoponica 1.9.7.

<sup>178</sup>Cicero, *De Natura Deorum* 2.131. Compare Geoponica 1.12.15, 31, 36.

<sup>179</sup>Cicero, *De Natura Deorum* 2.131.

<sup>180</sup>Compare Seneca, *Thyestes* 126-129 *nives quas . . . aestas veliferis solvit Etesias*. See also Aratus, *Phaenomena* 151-156.

<sup>181</sup>Polybius 5.5.3-7. <sup>182</sup>Plutarch, *Dion* 25.1-2. See also 23.3.

<sup>183</sup>55.267 (February, 1929). I confess that the caption taxes my credulity.

<sup>184</sup>Herodotus 2.20; Athenaeus 2.87; Pomponius Mela 1.53; Diodorus 1.38.2; Seneca 4.2.21-23; Pliny 5.55; Lucretius 6.712-718; Ammianus Marcellinus 22.15.5, 7. Not less interesting is Tacitus, *Annales* 6.33.

<sup>185</sup>Pliny 2.127. See also Arist., *Met.* 2.6, 362 a.

<sup>186</sup>Seneca 5.11.

<sup>187</sup>5.18.2. According to Arrian 6.25 the country of Gedrosia was likewise supplied with rain by periodical winds.

<sup>188</sup>Strabo 13.1.48, at the end.

#### LOCAL WINDS

There were, of course, many local winds, *peculiares quibusque gentibus venti*<sup>190</sup>, for instance the Iapygian in Calabria, the Scironian in Athens, the Cataegis in Pamphilia<sup>191</sup>. Horace prays that Iapyx may take Vergil safely to Greece<sup>192</sup>, for even an *albus Iapyx* may be stormy<sup>193</sup>. This is the wind that aided Cleopatra in her flight from the battle of Actium<sup>194</sup>. St. Paul<sup>195</sup> speaks of "a tempestuous wind called Euroclydon".

Our own Continent has winds with local names. The name 'chinook' is derived from the name of an Indian tribe that once lived near the mouth of the Columbia River. Members of a trading-post established by the Hudson Bay Fur Company at Astoria, Oregon, noticing that a warm southwest wind blew from over the Indian camp, called it 'chinook', a term that has been much extended<sup>196</sup>. In the level coastal plain of South Carolina the sea winds which wander inland and cool the hot villages are known as 'pine-land breezes' because they whisper through the tops of the long-leaf pines<sup>197</sup>.

#### THE SUN AND THE PERIODS OF CERTAIN WINDS

We have seen that the directions of the principal winds were referred to various positions of the sun. The periods of certain winds were likewise associated with this body<sup>198</sup>.

Thus Caecias and in general the winds north of the summer solstice blow about the time of the spring equinox, but after the autumn equinox Lips; and Zephyrus about the summer solstice, but about the winter solstice Eurus.

The etesian winds started to blow after the summer solstice<sup>199</sup>. The periods of other winds too might be dated with reference to the solstices and the equinoxes<sup>200</sup>.

Recently a Michigan seeress gave me the following directions: "Watch which way the wind is when the sun crosses the line. That will be the prevailing direction for the season". Another friend informs me that, if the wind is prevailing in the West or in the Southwest on March 21, one may look for an early spring, but, if the wind is in the Northwest at that time, one should look for a backward spring, because the wind will be in that direction for most of the time for three months.

In a previous paper I listed a number of other weather associations of the wind and the sun<sup>201</sup>.

#### THE WEATHER-VANE

The close association between wind and weather in general is shown by our giving to the device which shows the direction of the wind the name weather-vane rather than wind-vane. The contrivance shows

<sup>190</sup>Pliny 2.120. See also Seneca 5.17.4; Th., *De Ventis* 10.62; Procopius 8.4.10; Isidore 37.5. The most important source for references to local winds is Venterum Situs et Appellationes, which is based upon a work of Aristotle.

<sup>191</sup>Seneca 5.17.4; Vitruvius 1.6.10. <sup>192</sup>Carmina 1.3.4.

<sup>193</sup>Horace, *Carmina* 3.27.20. <sup>194</sup>Gellius 2.22.23.

<sup>195</sup>Acts 27.14.

<sup>196</sup>A. T. Burrows, *The Chinook Winds*, *The Journal of Geography* 2(1903), 124-136.

<sup>197</sup>The Atlantic Monthly 144 (1920), 349.

<sup>198</sup>Arist., *Met.* 2.6, 364 b. (E. W. Webster's translation).

<sup>199</sup>*Ibidem*, 362 a. <sup>200</sup>See THE CLASSICAL WEEKLY 22.26.

<sup>201</sup>THE CLASSICAL WEEKLY 22.29. Zeno, as quoted by Diogenes Laertius, Book 7, Chapter 1, Section 81. 152, says that the sun produces winds by turning the clouds into vapor.

more than the direction of the wind. It indicates also the kind of weather to follow, since in popular weather lore the wind is the pulse of the weather.

So far as I am aware, the earliest weather-vane of which we have any record played 'I spy' with the wind upon the beautiful octagonal Tower of the Winds which was erected in Athens, in the first century before Christ, by Andronicus of Cyrrhus. It consisted of a triton holding a rod in his right hand and working on a pivot in such a way that the rod always pointed at the figure which typified the prevailing wind<sup>202</sup>. With the help of the eight bas-reliefs below even a casual visitor in Athens might be able to identify the wind.

In far later times the cock adorned weather-vanes on Church spires. The reason for its selection, according to a medieval Latin poem, is that it was *mirabilis Dei creatura*, with many wholesome lessons to teach to the followers of Christ<sup>203</sup>.

Makeshift ways of telling from which direction the wind is coming are much more interesting than the use of the weather-vane. A peculiar method practised by seafaring men is thus described by Miss Pearl Wilson in THE CLASSICAL WEEKLY 10.24:

...If you hold your head so that the wind comes straight into one ear, and then turn it slowly till it is blowing with equal force in both ears, you will find yourself then facing it directly.

Attention has been called<sup>204</sup> to this method in connection with Vergil, Aeneid 3.513-514:

haud segnis strato surgit Palinurus et omnis  
explorat ventos atque auribus aera captat.

In THE CLASSICAL WEEKLY 13.219 I quoted a striking confirmatory passage from Kipling, Captains Courageous<sup>205</sup>:

He <Dan, the captain's son> could steer in anything short of half a gale from the feel of the wind on his face, humoring the We're Here just when she needed it<sup>206</sup>.

In Joseph Conrad's short story, The Inn of the Two Witches<sup>206a</sup>, the following statement is made of a seaman who had an adventure on land during a storm: "...he steered his course by the feel of the wind".

A method not entirely unlike that of sailors of old is attributed to one of the characters in The Story of Kennett, by Bayard Taylor<sup>207</sup>:

Once, indeed, she stopped, wet her forefinger with her tongue, and held it pointed in the air. There was very little breeze, but this natural weathercock revealed from what direction it came.

"Southwest!" she said, nodding her head—"lucky!"

An odd practice is that of tasting the wind to prophesy the direction of a coming wind. It is resorted to by a negro in Du Bose Heywood, Porgy<sup>208</sup>:

<sup>202</sup>Vitruvius 1.6.4.

<sup>203</sup>Stephen Gaselee, The Oxford Book of Medieval Latin Verse, 178-180 (Oxford: At the Clarendon Press, 1928).

<sup>204</sup>Hermes 42.44-45.

<sup>205</sup>Page 154 of the edition published by The Century Company for The Review of Reviews Company. <Pertinent is a note on Aeneid 3.514, by Dr. B. W. Mitchell, THE CLASSICAL WEEKLY 7 (1914), 168, C. K.>

<sup>206</sup>Compare a humorous sentence of O. Henry, in The Passing of Black Eagle, one of the stories in Roads of Destiny: "They want them whiskers and that nose of his to split the wind at the head of the column".

<sup>206a</sup>The story is to be found in a volume entitled Within the Tides: Tales, 210 (New York, Doubleday, Page, and Co., 1916).

<sup>207</sup>Page 2 (New York, Putnam, 1867).

<sup>208</sup>Page 137 (New York, George H. Doran Co., 1925).

Standing in the bow, he moistened his finger, and held it up to the wind. "You mens bes' git all de fish yuh kin tuhday", he admonished. "Win' be in de eas' by tuhmorruh. It gots dot wet tas' ter um now."

#### THE FARMER AND THE WINDS

Perhaps no classes of persons were more keenly interested in the winds and their directions than farmers and sailors<sup>209</sup>. The farmer gave heed to the wind in relation not only to the immediate activities of the day, but also to the general management of the farm throughout the year. For the benefit of the farmer Columella tells the kinds of weather to be expected at the rising and the setting of many stars throughout the year. It is but seldom that he fails to mention wind<sup>210</sup>.

The north wind was so severe that the pruner had to guard against exposing to it the incisions he made, and orchards and vineyards in general were not to face it, except in Africa (i. e. the province), Cyrene, and Egypt<sup>211</sup>. Trees were not to be dug up for transplanting with the wind blowing from the north or from any direction between it and the point of rising of the sun at the winter solstice; at any rate the roots were not to be exposed to these winds, since they killed the trees, and farmers did not always know why. Cato thought that rains and all winds should be avoided in transplanting<sup>212</sup>.

Trees and vines were to be planted so that they would be exposed to Aquilo<sup>213</sup>. Democritus thought that this produced more fragrant fruit<sup>214</sup>. There was a belief that this exposure caused trees to thrive and sprout and that the cold in season made them more compact and harder<sup>215</sup>. In vineyards, however, stakes were so arranged as to break the force of Aquilo and to shield the vines from cold<sup>216</sup>.

When Aquilo prevailed, no plowing, planting, or sowing was to be done. The cold would injure sprouting seed and would even freeze the roots of trees that were being transplanted. Praedoctus esto: alia robustis prosunt, alia infantibus<sup>217</sup>. Cato advised that in the operation of transplanting trees the bark should be marked so that the tree could be reset in the same direction; otherwise the northern part would be scorched by southern suns and the southern part frozen by Aquilo<sup>218</sup>.

Whoever felt the cold of Aquilo was to beware. It was more dangerous than the north wind. In Asia, Greece, Spain, coastal Italy, Campania, and Apulia, however, orchards and vineyards were to face it<sup>219</sup>. In Italy beehives were to face neither Aquilo nor Favonius, but the East<sup>220</sup>.

There was a widespread belief that male cattle were conceived when the parents were facing Aquilo<sup>221</sup>.

<sup>209</sup>See amusing passages in Lucian, Icaromenippus 25-26.

<sup>210</sup>He mentions wind in 11. 2, 4, 14, 15, 20, 21, 22, 24, 31, 34, 36, 37, 39, 40, 43, 45, 49, 51, 52, 58, 63, 65, 66, 74, 77, 78, 84, 88, 89, 93, 94, 97. <sup>211</sup>Pliny 18.328. <sup>212</sup>Pliny 17.85-86. <sup>213</sup>Pliny 18.334.

<sup>214</sup>Pliny 17.23.

<sup>215</sup>Pliny 17.10. See also Th., Historia Plantarum 4.1.4, 5.1.11.

<sup>216</sup>Columella 4.16.3. See also Pliny 17.10.

<sup>217</sup>Pliny 18.334.

<sup>218</sup>Pliny 17.83.

<sup>219</sup>Pliny 18.335-336.

<sup>220</sup>Pliny 21.80. See also Geoponica 15.2.1.

<sup>221</sup>Pliny 8.189, 18.336; Geoponica 17.3.6; Columella 7.3.12; Palladius, July, 4.4; Aristotle, De Animalibus Historia 6.19. De Generatione Animalium 4.2.

In healthful regions villas and vineyards were to face Subsolanus<sup>222</sup>. The Geoponica<sup>223</sup> advises having the house face the rising sun, because Notus was damp and capricious and unwholesome. Pliny<sup>224</sup> records the same advice for villas in temperate regions, but says that in hot places they should face the north, in cold places the south.

It was recommended that apiaries and vineyards of Italy and Gaul should face Voltumnus<sup>225</sup>.

Those who were planting olives were to be on their guard against Notus for four days at the rising of the Vergiliae. While it was blowing the farmer was not to fell timber or to handle wine, since for Italy this wind meant either moisture or much heat. Palms might face this wind, but not the pruned parts of trees or vines. The man who did grafting was fearful of its effect on twigs and buds<sup>226</sup>. Grafting of olive trees and fig trees was not to be done with a south wind blowing<sup>227</sup>. Pruning of vines and trees should be done with dry winds blowing<sup>228</sup>.

Budding trees and those in bloom were injured by a hot wind and by a cold wind<sup>229</sup>. Under the spell of Auster fruit matured more quickly, but not so well<sup>230</sup>. Both vines and trees thrive better when they were facing Aquilo<sup>231</sup>.

*Dolia* were not to be opened except on a clear day, with Auster blowing and the moon full<sup>232</sup>. Some wine-tasters tasted wine with the north wind blowing because then the wine was clear and undisturbed, but experts thought that better proof of the quality of wine was to be had under the trying conditions provided by Auster<sup>233</sup>. A writer who visited Sicily half a century ago says that "wine cannot be fined" during the days when the sirocco is blowing<sup>234</sup>.

As the north wind caused the conception of male cattle, so the south wind insured the birth of females<sup>235</sup>. Africus, too, influenced the conception of females<sup>236</sup>.

It was recommended that granaries should face either Septentrio or Aquilo, since it was believed that winds from other directions generated insects destructive to grain<sup>237</sup>. It was supposed that book worms owed their origin to south winds. For this reason Vitruvius<sup>238</sup> was opposed to having the library of a house face this direction.

Pliny informs us that animals mated and began to conceive when Favonius started to blow. This wind he calls *genitalis spiritus mundi*. An even more vivid expression of the same idea is the peasants' name for it, *callithio*<sup>239</sup>. In this connection it is pertinent to quote from a description of an old Scotch custom<sup>240</sup>:

<sup>222</sup>Pliny 18.337. <sup>223</sup>2.3.6. <sup>224</sup>18.33. <sup>225</sup>Pliny 18.338.

<sup>226</sup>Pliny 18.329. On handling wine see also Cato 31.2.

<sup>227</sup>Pliny 17.112; Cato 40.1. <sup>228</sup>Pliny 15.62.

<sup>229</sup>Th., De Causis Plantarum 4.14.1. <sup>230</sup>Pliny 17.11.

<sup>231</sup>Pliny 17.23. <sup>232</sup>Pliny 14.135. <sup>233</sup>Geoponica 7.7.1.

<sup>234</sup>Smyth (as cited in note 53), page 5.

<sup>235</sup>Pliny 8.180, 18.330; Columella 7.3.12; Geoponica 17.3.6; Aristotle, as cited in note 221. <sup>236</sup>Pliny 18.336.

<sup>237</sup>Vitruvius 6.6.4. <See also THE CLASSICAL WEEKLY 23.49, column 2. C. K.>.

<sup>238</sup>6.4.1. Aelian says (De Natura Animalium 17.40) that a heavy atmosphere brings *τετραγυαθα* into being.

<sup>239</sup>Pliny 16.93-94. In the Transactions and Proceedings of the American Philological Association 51.110 I devoted over half a page to the belief in the fecundating powers of the winds.

<sup>240</sup>W. Carew Hazlitt, Faiths and Folklore. A Dictionary of National Beliefs, Superstitions and Popular Customs, Past and Present, with Their Classical and Foreign Analogues, Described and Illustrated, 638 (London, Reeves and Turner, 1905).

The first night of the new year, when the wind blows from the west, they call *dàr-na coille*, the night of the fecundation of the trees; and from this circumstance has been derived the name of that night in the Gaelic language.

Cato advised that olive trees should face Favonius<sup>241</sup>. Since Favonius softened the ground, it indicated the time to prune vines, tend to fruits, plant trees, and give attention to olive trees. By its breezes this wind nursed things along<sup>242</sup>. Unless the berries of olive trees were plucked before Favonius came, they acquired new strength and clung to the trees<sup>243</sup>.

In Provincia Narbonensis and in Liguria and part of Etruria it was considered folly to sow in the face of Circius, but far-sighted to receive it from one side<sup>244</sup>.

#### LOCAL WINDS AND WARFARE

A knowledge of the peculiarities of local winds was a great military asset and sometimes meant the difference between victory and defeat<sup>245</sup>. I shall give two examples of this by land and two by sea.

A good illustration of the deliberate, rather than the fortuitous, use of the wind is to be found in the career of Camillus. Latins and Volscians, caught between two Roman forces, barricaded their encampment with a formidable wooden palisade. The Romans had to act before a relieving force should come. Noticing that a strong wind blew down from the mountains regularly at sunrise<sup>246</sup>, Camillus planned a daybreak attack with two contingents, one armed with weapons, the other with fire. The fire was directed at the point where the wind struck the defences with greatest speed. The fiery darts found lodgment in the crowded timbers of the palisade and flames soon spread in every direction and finally reached the camp. Few of the Latins made their escape<sup>247</sup>.

Beyond the river Tagonius in Spain amid the caves and hollows of a cliff that faced the north dwelt the Characitani, a tribe that felt boastfully secure in the fastnesses of its retreat. Sertorius, encamping at the base of the cliff, found it unassailable, but he noticed that great quantities of dust were being carried against the openings from the porous and crumbly soil below. Learning the local characteristics of the wind, he had his men collect loose earth, which the barbarians regarded as a mound for a futile assault upon them. The next day, however, a breeze sprang up which grew stronger and stronger and carried up more and more dust. Horses were driven back and forth through it in order to pulverize it still more. Since all the caves faced the wind, the barbarians were soon being blinded and choked. They held out with difficulty for two days, but surrendered on the third. The peculiar nature of this feat added greatly to the prestige of Sertorius<sup>248</sup>.

<sup>241</sup>Pliny 15.21, 18.337; Cato 6.2; Varro, De Re Rustica 1.24.1.

<sup>242</sup>Pliny 18.337. <sup>243</sup>Pliny 15.12. <sup>244</sup>Pliny 17.21.

<sup>245</sup>I am planning to discuss in a general volume on ancient warfare the effect of the weather on military operations both by land and by sea. I touched upon the subject in THE CLASSICAL WEEKLY 23.4.

<sup>246</sup>On the association of the wind with sunrise see Arist., Met. 2.5, 361 b, Prob. 26.34; Th., De Ventis 3.16-18; Pliny 2.129. For mention of this association in connection with military operations see Livy 25.27.6, 29.27.8; Lucan 5.717-718. <See also note 85, above. C. K.>.

<sup>247</sup>Plutarch, Camillus 34.4-5. <sup>248</sup>Plutarch, Sertorius 17.3-7.



A good example of the effect of the local vagaries of wind upon naval warfare is afforded by the Battle of Salamis<sup>249</sup>:

Themistocles is thought to have divined the best time for fighting with no less success than the best place, inasmuch as he took care not to send his triremes bow on against the Barbarian vessels until the hour of the day had come which always brought the breeze fresh from the sea and a swell rolling through the strait. This breeze brought no harm to the Hellenic ships, since they lay low in the water and were rather small; but for the Barbarian ships, with their towering sterns and lofty decks and sluggish movements in getting under way, it was fatal, since it smote them and slewed them round broadside to the Greeks, who set upon them sharply...

During the Peloponnesian War twenty Athenian vessels under Phormio attacked forty-seven vessels of the Corinthians and their allies in the Corinthian Gulf. Even this numerical superiority did not give the enemy confidence, for they formed in a circle with the prows outward. The Athenians sailed round and round them, keeping them ever alert for an attack. But Phormio had given orders not to charge; he was hoping that the enemy would not be able to keep their ships in order and also that a breeze which usually blew from the gulf toward dawn would spring up and complete the confusion. When the wind observed its daily schedule, the Athenians made the long-delayed attack. They sank some ships and captured twelve others as they were fleeing<sup>250</sup>.

#### HARBINGERS OF WIND

There were many ways of judging what kind of wind was going to blow. Pindar has a sentence with a proverbial ring, to the effect that the wise man knew what the third day's wind was going to be<sup>251</sup>. The air as it condensed gave indications by its thickness or thinness or by its cold or heat and by other characteristics also<sup>252</sup>, but the winds themselves were good indexes.

When winds, instead of being dispersed by other winds, died down of their own accord, they changed to the next wind to the right, going around the compass-chart sunwise<sup>253</sup>. If the wind that happened to be blowing was felt to be hot, one might conclude that it would last for several days<sup>254</sup>.

Seneca<sup>255</sup> mentions breezes which rose before day-break, but fell when the sun became strong. They started in the spring and ceased by the end of summer.

If periodic winds have been blowing for a long time, and a windy autumn follows, the winter is windless: if however the contrary happens, the character of winter is also reversed<sup>256</sup>.

The earth, too, was a prophet, for, as Pliny<sup>257</sup> tells us, it proclaimed a north wind when it was becoming dry, but a south wind when it was becoming moist with

dew. Theophrastus<sup>258</sup>, however, simply says that during a northerly wind everything dries up, but during a south wind there is abundant moisture.

It is said that breezes do not blow from a river in a hot country. The Nile, the source and mouth of which are in hot lands, is given as an example of this<sup>259</sup>. It seems that rivers had a reputation for not stirring up breezes in the morning, for we are told that Hannibal planned the Battle of Cannae in a way to take advantage of local conditions when he learned that the Volturnus caused strong winds to blow in the morning<sup>260</sup>.

When rain comes, wind ceases, but wind generally follows rain in those places where the rain falls<sup>261</sup>. A south wind generally blows after snow and a north wind after hoar-frost<sup>262</sup>.

Aristotle was much interested in the connection between shooting stars and wind<sup>263</sup>. Signs from them and from comets are given in THE CLASSICAL WEEKLY 20.46<sup>264</sup>, 23.12.

If the sky is overcast, wind comes from the quarter in which the sun is first seen<sup>265</sup>, or, as Pliny<sup>266</sup> puts it, in which the scattering of the clouds has revealed the sky. Other relations of clouds and winds are noted in THE CLASSICAL WEEKLY 23.3.

Thunder and lightning, too, were studied as indexes of the winds that were to be expected. The signs derived from them are thus summarized by Theophrastus:

If lightning comes from all sides, it indicates rain, and from any quarter from which the flashes come in quick succession there will be wind. In summer from whatever quarter lightning and thunder come, there will be violent winds<sup>267</sup>: if the flashes are brilliant and startling, the wind will come sooner and be more violent; if they are of gentler character and come at longer intervals, the wind will get up gradually. In winter and autumn however the reverse happens, for the lightning causes the wind to cease: and, the more violent the lightning and thunder are, the more will the wind be reduced. In spring I consider that the indications would not so invariably have the same meaning,—and this is also true of winter.

If, while a south wind is blowing, there comes lightning from the north, the wind ceases. If there is lightning at dawn, the wind generally ceases on the third day: other winds than a south wind however do not cease till the fifth seventh or ninth day, though a wind which got up in the afternoon will cease sooner<sup>268</sup>.

Thunder in winter at dawn indicates wind<sup>269</sup> rather than rain; thunder in summer at midday or in the evening is a sign of rain. If lightning is seen from all sides, it will be a sign of rain or wind<sup>270</sup>, and also if it occurs in the evening. Again, if when the south wind<sup>271</sup>

<sup>249</sup>De Signis 30. Compare Th., De Ventis 10.58.

<sup>250</sup>Th., De Signis 4.25 seems to say in one breath that the Nile is the sole example of this and in the next to make a generalization that includes rivers in Libya, Babylonia, and Sousa. See also Th., De Ventis 6.46; Ammianus Marcellinus 22.15.13.

<sup>251</sup>Frontinus, Strategemata 2.2.7. <See note 85, above. C.K.>.

<sup>252</sup>Arist., Met. 2.4, 360 b, 361 b. Compare Th., De Ventis 8.50.

<sup>253</sup>Th., De Signis 34. Compare Arist., Prob. 26.3.

<sup>254</sup>Prob. 26.23. See also Th., De Ventis 6.36.

<sup>255</sup>See also Lydus, De Ostentis 4. <sup>256</sup>Th., De Signis 31.

<sup>257</sup>2.120.

<sup>258</sup>See also Aratus, Phaenomena 924-925; Geoponica 1.3.3, 1.11.8.

<sup>259</sup>Th., De Signis 32-33 (A. Hort's translation, in The Loeb Classical Library). See also Pliny 18.354.

<sup>260</sup>See also Pliny 18.354.

<sup>261</sup>See also Aratus, Phaenomena 933-937; Vergil, Georgics 1.

<sup>262</sup>370-373, and Servius there, on 370; Geoponica 1.3.3.

<sup>263</sup>Compare Arist., Prob. 26.20. See also an interesting note in R. C. Jebb's edition of the Ajax of Sophocles, Appendix, 223-224

(Cambridge, at the University Press, 1896).

<sup>249</sup>Plutarch, Themistocles 14.2 (B. Perrin's translation, in The Loeb Classical Library).

<sup>250</sup>Thucydides 2.83-84. For other examples of familiarity with local conditions see Plutarch, Marius 37.3; Procopius 8.4.10. Polybius 4.44 is interesting in contrasting the aid afforded by the winds to those sailing to and from Brundisium with the difficulties it presented to those sailing to and from Chalcidion.

<sup>251</sup>Nemea 7.17. Compare Vegetius 4.41 Aer vero et mare ipsum nubiumque magnitudo vel species sollicitos instruit nautas.

<sup>252</sup>Th., De Ventis 6.35.

<sup>253</sup>Th., De Signis 35. <For "sunwise" see above, note 23a.

C. K.> <sup>254</sup>Pliny 18.339. <sup>255</sup>5.7. <sup>256</sup>Th., De Signis 34. <sup>257</sup>18.339.



is blowing at early dawn, there is lightning from the same quarter, it indicates rain or wind. When the west wind is accompanied by lightning from the north, it indicates either storm or rain. Lightning in the evening in summer time indicates rain within three days, if not immediately. Lightning from the north in late summer is a sign of rain<sup>272</sup>.

Signs of wind are swelling seas, moaning billows, far-reaching beaches, murmuring crags and promontories, and echoing woods<sup>273</sup>. An explanation of the sounds that herald a south wind is given by Aristotle<sup>274</sup>:

When a south wind is going to blow there is a premonitory indication: a sound is heard in the places from which the eruptions<sup>275</sup> issue. This is because the sea is being pushed on from a distance and its advance thrusts back into the earth the wind that was issuing from it. The reason why there is a noise and no earthquake is that the underground spaces are so extensive in proportion to the quantity of the air that is being driven on that the wind slips into the void beyond.

Modern descriptions of the sounds that precede storms from the seas are not less picturesque than ancient accounts. Washington Irving gives a vivid account of a rising storm encountered by Columbus<sup>276</sup> in the New World:

One of those tremendous hurricanes which sometimes sweep those latitudes had gradually gathered up. The baleful appearance of the heavens, the wild look of the ocean, the rising murmur of the winds, all gave notice of its approach.

A passage in Thoreau<sup>277</sup> is so illuminating that it deserves quotation in full:

... a sudden loud sound from the sea, as if a large steamer were letting off steam by the shore. . . . The old man said that this was what they called the "rut," a peculiar roar of the sea before the wind changes, which, however, he could not account for. He thought that he could tell all about the weather from the sounds which the sea made.

Old Josselyn, who came to New England in 1638, has it among his weather-signs that "the resounding of the sea from the shore, and murmuring of the winds in the woods, without apparent wind<sup>278</sup>, sheweth wind to follow."

Being on another part of the coast one night since this, I heard the roar of the surf a mile distant, and the inhabitants said it was a sign that the wind would work round east, and we should have rainy weather. The ocean was heaped up somewhere at the eastward, and this roar was occasioned by its effort to preserve its equilibrium, the wave reaching the shore before the wind. Also the captain of a packet between this country and England told me that he sometimes met with a wave on the Atlantic coming against the wind, perhaps in a calm sea, which indicated that at a distance the wind was coming from an opposite quarter, but the undulation had traveled faster than it.

<sup>272</sup>The passage quoted in the text is to be found in Th., De Signis 21 (A. Hort's translation).

<sup>273</sup>Aratus, *Phaenomena* 909-912; Th., De Signis 29; *Geoponica* 1.11.7; Vergil, *Georgics* 1.356-359, *Aeneid* 10.98-99 and Servius on 98; Lucretius 2.764-767; Cicero, *De Divinatione* 1.13; Pliny 18.359-360; Seneca, *Agamemnon* 487-489. Almost all these passages are quoted in full by A. S. Pease, M. Tulli Ciceronis *De Divinatione*, VI, pages 79-80 (University of Illinois Studies in Language and Literature, VI, VIII). Lucan 5.571-572 makes the boatman Amyclas say to Caesar as they prepare to cross the Adriatic Sea: *si murmur ponti consulimus, Cauri verunt mare*.

<sup>274</sup>Arist., *Met.* 2.8, 367 a (E. W. Webster's translation).

<sup>275</sup>I. e. from winds that move beneath the surface of the earth.

<sup>276</sup>Columbus, Book XV, Chapter I.

<sup>277</sup>The *Wellfleet Oysterman*, Cape Cod, 114-116 (Riverside edition).

<sup>278</sup>Compare Aratus, *Phaenomena* 911.

A far different, but no less picturesque, vocabulary is used by Du Bose Heyward<sup>279</sup> to describe the noises of the storm-bringing wind:

At one o'clock the tension snapped. As though it had been awaiting St. Christopher's chimes to announce "Zero Hour," the wind swung into the east, and its voice dropped an octave, and changed its quality. Instead of the complaining whine, a grave, sustained note came in from the Atlantic, with an undertone of alarming variations, that sounded oddly out of place as it traversed the inert waters of the bay.

Slowly the threatening undertone of the wind grew louder. Then, as though a curtain had been lowered across the harbor mouth, everything beyond was blotted out by a milky screen.

A picturesque name for a sound made by the sea is 'calling of the sea':

A murmuring or roaring noise, sometimes heard several miles inland during a calm, in the direction from which the wind is about to spring up, and is known as the calling of the sea<sup>280</sup>.

... If at sea during a wind there is a sudden calm, it indicates a change or an increase of wind. If promontories seem to stand high out of the sea<sup>281</sup>, or a single island looks like several, it indicates a change to south wind. If the land looks black from the sea, it indicates a north wind, if white, a south wind<sup>282</sup>.

... The ebb-tide indicates a north wind, the flowing tide a wind from the south. For, if the flowing sets from the north, there is a change to the south, and if an ebb-tide comes from the south, there is a change to the north<sup>283</sup>.

Waves rising higher than usual signified the advent of winds<sup>284</sup>.

Interesting signs of wind are provided by living things. If a pilot sees cranes turn and fly in the opposite direction, he knows that wind is threatening from the quarter toward which they had been going<sup>285</sup>. Winds come from the direction in which dolphins appear<sup>286</sup>. It is still believed by seamen in the Aegean that dolphins show the direction of the next wind or of the wind on the following day<sup>287</sup>. Many similar signs of wind derived by the ancients from the actions and the habits of animals both by sea and by land are listed in THE CLASSICAL WEEKLY 14.97-98.

Modern illustrations of signs of wind given by animal life are not hard to find. There is a Louisiana belief<sup>288</sup> that

Roosters resting on a tree limb always roost with their heads pointing in the direction in which the wind will blow the next morning.

<sup>279</sup>Porgy, 142-143 (New York, George H. Doran Company, 1925).

<sup>280</sup>Richard Inwards, *Weather Lore: A Collection of Proverbs, Sayings, and Rules Concerning the Weather*, 127 (London, Elliot Stock, 1898). The quotation is exact.

<sup>281</sup>Compare Arist., *Met.* 3.4, 373 b, Prob. 26.53. In reporting the successful crossing of the English Channel by a swimmer starting from France a newspaper dispatch said: "At 8 o'clock the wind had freshened and we could plainly see the sands of South Forland on the English side, which was a bad sign, as such conditions usually presage a high wind."

<sup>282</sup>The passage "If at sea . . . a south wind" is to be found in Th., De Signis 31 (A. Hort's translation, in The Loeb Classical Library).

<sup>283</sup>*Ibidem*, 29 (A. Hort's translation).

<sup>284</sup>Th., De Signis 6.35; Pliny 18.359.

<sup>285</sup>Aelian, *De Natura Animalium* 3.14. Compare 7.7.

<sup>286</sup>Alciphron 1.10; Artemidorus 1.16 (page 110 of R. Hercher's edition, Leipzig, Teubner, 1864); Pliny 18.361; Bede 36. See also THE CLASSICAL WEEKLY 14.98.

<sup>287</sup>Erhard, *Fauna der Cykladen*, 1.27 (Leipzig, Voigt und Gunther, 1858).

<sup>288</sup>Journal of American Folk-Lore 40 (1927), 200, No. 1385.

See also 201, No. 1397.

I quote the following paragraph from a newspaper article<sup>289</sup>:

Just before a hurricane there invariably arrive off the Caribbean coasts vast numbers of these weather-wise birds that are called in Dominica 'Twa-oo,' from their peculiar cry. These birds are regarded locally as sure harbingers of the dreaded tropical storms. They only appear during the calms immediately before the wind and rain break loose in all their fury. They cover the rocks in large flocks, coming in from the desolate sandy islands where they breed. American bird books call them the 'sooty tern,' but they are known to the natives as 'hurricane birds.'

A most remarkable tale, interesting either as fact or as fiction, is told of the Seminoles of Florida<sup>290</sup>:

Four weeks before the hurricane struck Palm Beach and the east coast of Florida last September <1928>, the Seminole Indians of the Okeechobee Band prophesied the disaster. They vividly described the velocity of the coming wind, specified the depth of water which would sweep the Everglades, and warned of general destruction and appalling loss of life.

No quibbling marked their predictions. The blossoming of the saw grass first attracted their attention. This blossoming was out of season, and untimely blossoming of this Everglades grass has been for centuries a signal to the Seminoles to stop, look, and listen.

They sensed a certain tenseness in the stillness which hung over the 'glades; the smaller birds stopped singing and chirped nervously, and their flights were short and furtive—their general drift was northward and westward. The great buzzards, too, were apprehensive and seemed to group themselves as though in consultation. Instead of taking their usual great, gliding flights, they went aloft and nervously beat the air—their drift was northward and westward. The alligators barked with unusual frequency and exposed themselves recklessly, moving in great numbers toward deeper waters. The water snakes moved with them. Meadow rats and rabbits began a trek along the roads and trails, northward and westward, squeaking and grunting irritably, making little effort to hide their movement. Crickets signaled a warning to those who

would listen. This was enough. The Seminoles had read the 'signs'.

Having read the 'signs', the Seminoles prepared a brief migration into the land of their brothers, the Tallahasseees, far to the north and west of their own threatened territory. Before leaving they urged their white friends to follow them to safety. . . . Insofar as is known, not a single Seminole was lost in the storm.

A friend of mine who crossed the Everglades in the middle of the summer of 1929 heard that the Seminoles had warned the white people of impending storm because of the blooming of a plant out of season and because of the restlessness of alligators. In the early fall there were storms to the south of Florida, but most of their fury was spent before they reached Florida.

Theophrastus lists still other miscellaneous signs:

Again<sup>291</sup>, if the wind is from the south, the snuff of the lamp-wick indicates rain; it also indicates wind in proportion to its bulk and size: while if the snuff is small, like millet-seed, and of bright colour, it indicates rain as well as wind. Again, when in winter the lamp rejects the flame but catches, as it were, here and there in spurts<sup>292</sup>, it is a sign of rain: so also is it, if the rays of light leap up on the lamp, or if there are sparks.

Some say<sup>293</sup> that, if in the embers there is an appearance as of shining hail-stones, it generally prognosticates hail<sup>294</sup>; while, if the appearance is like a number of small shining millet-seeds, it portends fair weather, if there is wind at the time, but, if there is no wind, rain or wind.

One recalls in this connection that Aeolus foretold the rising winds by observing fire<sup>295</sup>.

The cracking sounds made by glued articles when the south wind was blowing indicated a change to the north wind<sup>296</sup>.

(To be concluded)

UNIVERSITY OF MICHIGAN

EUGENE S. MCCARTNEY

<sup>289</sup>The Detroit News, Sunday, June 9, 1929, Feature-Fiction Section, page 14.

<sup>290</sup>Clarence E. Bosworth, *Red Signs and White Science: How the Seminoles Read the Signs of Nature and Escaped the Recent Tropical Hurricane*, American Forests and Forest Life 35 (1929), 85-88. The passages quoted in the text appear on pages 85-86.

<sup>291</sup>For this passage see Th., *De Signis* 14 (A. Hort's translation).

<sup>292</sup>Compare Vergil, *Georgics* 1.392; Pliny 18.358.

<sup>293</sup>Th., *De Signis* 25 (A. Hort's translation).

<sup>294</sup>Aratus, *Phaenomena* 1041-1043.

<sup>295</sup>Diodorus Siculus 5.7.7. See also *THE CLASSICAL WEEKLY* 18.156, 23.6. Interesting, too, is Pliny 18.358.

<sup>296</sup>Arist., *Prob.* 1.24. Compare Th., *De Signis* 30.